Brief Project Description

The project would have four components.

1. **Component 1 – Health service delivery (approximately US$12.0 m)**. Priorities for support through this component will include support for: (a) implementation of the Basic Service Package (BSP) for primary health care and for improving district-level planning and management capacity. Initial priorities for support include financing for international and local advisors to provide “hands-on” technical assistance to districts; improved transportation (vehicles and motorcycles); and direct financing for BSP implementation through district annual plans, including for outreach services to remote areas; (b) strengthening community nutrition and health services, through direct financing for community-level activities by health districts, financing of contracts for local and international NGOs to provide community nutrition and health service in partnership with MOH and districts, and technical support to the MOH in developing nutrition policies and implementation strategies, (c) improving hospital care and the referral system, through support for implementation of the Hospital Service Package (HSP); financing of technical assistance for “commissioning” of the new regional hospitals, and support for “twinning” arrangements with hospitals in the sub-regions to strengthen hospital management and key support services (such as hospital pharmacies and laboratories); (d) assuring quality of care throughout the health system, including improvements in infrastructure and equipment at health facilities, with an initial focus on upgrading existing Community Health Centers (CHCs) to include maternity rooms and equipment, and ensuring adequate disposal of biomedical waste. The Project financing will remain flexible to cover gaps in anticipated financing from other externally financed programs, or in the event of an influenza pandemic or other public health crisis.

2. **Component 2 – Support Services, Human Resources, and Management (approximately US$4.0 m)**. Priorities for this components will include: (a) strengthening the capacity of the Institute of Health Sciences (IHS) to provide technical and management training to health staff, including through establishing a “twinning” arrangement with a training institution in the subregion; (b) based on the updated Health Workforce Plan, provide direct support for priority local and international training for Timorese staff; support improved human resource development and management practices (in cooperation with EC technical assistance), and support the MOH’s efforts to improve the identification, mobilization and management of priority Technical Assistance services; (c) strengthen procurement, distribution and management of essential drugs and supplies, including through support for senior technical advisors to

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1 The MOH has submitted Global Fund proposals for TB and malaria, which would cover most of the financing needs for these programs. Funding decisions are expected by mid-November 2007. Depending on the outcome of funding decisions and effectiveness dates of these new grants, the Project could help fill any remaining funding gaps these diseases control programs, or for HIV and STI prevention as needed.
SAMES (continuation of support through an EC trust fund) and support for further strengthening of SAMES management and reforms; and (d) strengthen core MOH “support” and fiduciary functions, including for planning and supervision of civil works, logistics and maintenance of infrastructure and equipment; procurement; financial management; and information and communications technologies (ICT). The project will support technical assistance, training, and local contractual staff for key functions in these service units (including for Finance, Procurement, and Infrastructure), as well as “contracting out” of certain technical services (including for maintenance of computer equipment, and use of procurement agents for complex procurements).

3. **Component 3 – Coordination, planning and monitoring (approximately US$2.0m).** Support from this component will include: (a) support for establishment of the Department of International Cooperation to strengthen MOH capacity for donor coordination, including financing a senior advisor for this Department, while ensuring that line departments take the lead in implementation of Project- and donor-financed activities; (b) technical assistance (in collaboration with EC) for strengthening the annual planning and budgeting process at central and district level, including integration of external assistance into annual plans and reporting; (c) further strengthening the MOH Health Management Information System (HMIS), including through technical assistance (through WHO) and support for related hardware and software; (d) direct financing of surveys and other evaluations, including through the national statistics bureau as well as through other public, private and nongovernmental organizations; (e) improved policy development and research capacity within MoH, including targeted support for operational research.

4. **Component 4 – Innovation and Program Development (approximately US$2.3m):** Component 4 provide flexible support to piloting new initiatives or further developing promising approaches, together with technical assistance for implementation, evaluation, and lesson-sharing. Successful initiatives will be scaled up and incorporated into MTEF and annual plans and budgets, and/or will contribute to revisions in national policies. The following are likely to be priorities: (a) promote community demand for health services, including through the Family Health Promoter Program, and piloting financial incentives for use of key services (e.g., assisted deliveries); (b) provide incentives to service providers, particularly to attract and retain key health personnel in remote/rural areas, including performance-based incentives; (c) establish effective public-private partnership options and contracting mechanisms. The Rapid Results Initiative (RRI) approach will be adapted as a methodology to pilot new initiatives and to build local implementation capacity and strengthen the focus on results, initially in coordination with the roll-out of the BSP. An MOH committee will be established to provide oversight for the fund and vet proposals. Annual “lesson sharing” events will be organized to share results and assess priorities for scaling up. The guidelines for selecting, financing, and evaluating activities under this component will be included in the Project Operational Manual.
Environmental Impacts and Management

Civil Works

The project will not finance major construction of new hospitals, but may support maintenance and rehabilitation, as well as building and/or rehabilitation of some health posts. As such, it is envisaged that civil works and the corresponding environmental impacts, if any, will be minimal and temporary, which will include noise, air emissions and generation of construction wastes. Procedures to address these impacts will be included in civil works contracts, where contractors will be required to formulate and implement proper housekeeping measures to address the issues.

Health Care Waste Characterization and Management

Waste characterization. A waste characterization in Timor Leste health care facilities undertaken under the first Health Sector Rehabilitation and Development Project (HSRDP1) indicated that about 80% of the total waste generated by healthcare activities can be classified as general waste. The remaining 20% of the total waste can be classified as hazardous materials, with the majority (15%) considered as infectious or anatomic waste; about 3% chemical and pharmaceutical waste and 1% genotoxic and radioactive wastes. An analysis of the types of healthcare waste generated in Timor-Leste showed that genotoxic waste and radioactive wastes are not produced in the country.

Health care waste management. In the past, community health care centers and hospitals in Timor Leste only burnt in the open or buried in the open health care wastes as a way of disposing them. Neither method is satisfactory as the waste could not be completely burnt and would produce highly toxic substances such as dioxins and furans or, if buried, could be dug up by animals and either way could remain toxic or dangerous for long periods. Some hospitals had been provided with diesel powered incinerators that were large, expensive to run and not appropriate to the needs of small rural facilities.

The alternative to disposal on site is collection and disposal at a central location. This however was not considered to be a practical solution in Timor Leste, due to the bad state of the roads, the remote location of many health facilities, heavy rainfall during the rainy season and the relatively high cost of vehicles, fuel and maintenance.

What is therefore practical health care waste management at the community health care facilities is a small efficient incinerator (or gasifier) that could be easily managed, use locally available fuel, produce no toxic gases and reduce the waste to a small amount of harmless ash that could be safely disposed of by burial on the site.

Under HSRDP1, all community health care centers were equipped with clinical waste gasifiers to be used for the safe disposal of clinical wastes, 13 of which have been supplied under HSRDP1 or one per district. For the four hospitals being constructed under the second Health Sector Rehabilitation and Development Project (HSRDP2),
similar but larger gasifiers were provided to these hospitals. The use of gasifiers in managing health care wastes will continue under the project.

The gasifiers are designed to operate using easily obtainable and cheap biomass fuels such as wood or coconut shells and they require no additional fuel such as diesel or gas or any electrical connections. The gasifiers have two chambers: the fuel and small bags of clinical waste are placed in alternating layers in the first of the chambers and when lit, the fuel in the lowest layer begins to convert to charcoal while the temperature rises rapidly to 900 degrees centigrade. As the hydrocarbons contained in the waste material, particularly fats and plastics, begin to volatilise, the temperature rises to 1000 degrees centigrade. These volatile gases pass through the hot charcoal where they further react to form hydrogen methane and carbon monoxide. These gases pass into the second chamber where a process of combustion converts them into benign carbon dioxide and water vapor which is discharged through a flue at the top. Meanwhile in the first chamber the process begins again with the second layer of fuel and the second bag of waste. Once the burning process is complete the gasifier is left to cool down and then the ash door is opened and the sterile ash can be removed.

The gasifier is easy to load and ignite and once lit requires no further attendance. The waste is reduced to small quantities of ash, toxic volatile substances are turned into harmless gases, sharps are reduced in size and strength and rendered safe to handle and the small quantities of ash can be safely buried. If managed properly there should be no visible smoke coming from the flue and no measurable hydrocarbons.

Asbestos Generation and Management

The main activities of the program that could have implications for asbestos generation and management are the rehabilitation of some health posts and hospitals.

Asbestos is found in Timor Leste mainly as part of a variety of asbestos-cement building materials. These are mainly corrugated roofing sheets and flat sheets that have been used for walling or ceiling panels. Samples of corrugated roofing sheets and flat sheets were taken to UK for testing during the implementation of HSRDP1 and roof sheets were found to contain white and brown asbestos and the flat sheets white asbestos only. These materials are considered safe if they are left in position and not damaged, cut or abraded.

In response to the need to reduce any potential health risks from asbestos resulting from reconstruction activities in Timor-Leste, the East Timor Transition Administration (ETTA) produced “Guidelines on Maintenance, Handling and Disposal of Asbestos Materials and Asbestos Waste” in September 2000, in cooperation with AusAid. This document contains: (i) guidelines on the maintenance of asbestos-cement products; (ii) guidelines on the handling of building rubble and other material containing asbestos; and (iii) guidance for the siting and management of asbestos disposal sites.

The project documentation will specify that all civil works activities will be in full compliance with the guidelines described above and all civil works contracts will provide
for the safe handling and disposal of asbestos in accordance with the guidelines. These
guidelines will be attached to the bidding documents as they were in the HSRDP1 and
HSRDP2 bidding documents and the Project will ensure that the guidelines are followed
wherever the contractors encounter any asbestos.

Institutional Arrangements

Ministry of Health. The MOH will ensure that all health posts and hospitals that will be
supported under the project have their respective gasifiers (if not yet provided under
HSRDP1 and HSRDP2) for managing health care wastes. Those that do not have the
gasifiers either will be required to purchase them charged against the project or will be
required to bring their wastes to the nearest community health care facility or health post
or hospital for treatment prior to disposal.

Health Care Facility. Each health care facility (health posts and hospitals) will ensure
that civil works contracts will contain clause on good environmental practice and proper
housekeeping measures, including adherence by the contractors to the “Guidelines on
Maintenance, Handling and Disposal of Asbestos Materials and Asbestos Waste”. The
facility will ensure the proper management of health care wastes that will be generated
through the use of gasifiers to treatment prior to final disposal.